



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

| APPLICATION NO.        | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|-------------|----------------------|---------------------|------------------|
| 10/717,892             | 11/20/2003  | Robert A. Koch       | BS02301CON2         | 9410             |
| 38516                  | 7590        | 12/11/2008           |                     |                  |
| AT&T Legal Department  |             |                      |                     |                  |
| Attn: Patent Docketing |             |                      |                     |                  |
| Room 2A-207            |             |                      |                     |                  |
| One AT&T Way           |             |                      |                     |                  |
| Bedminster, NJ 07921   |             |                      |                     |                  |
| EXAMINER               |             |                      |                     |                  |
| DESIR, PIERRE LOUIS    |             |                      |                     |                  |
| ART UNIT               |             | PAPER NUMBER         |                     |                  |
| 2617                   |             |                      |                     |                  |
| MAIL DATE              |             | DELIVERY MODE        |                     |                  |
| 12/11/2008             |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/717,892

**Applicant(s)**

KOCH ET AL.

**Examiner**

PIERRE-LOUIS DESIR

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 5-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1 and 11 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-8, 10-14, 16, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller (US Patent Number 6,775,546) in view of Koster, US 6356756 B1, and Jones et al. (US Patent Number 6195,422).

Regarding claims 1 and 11, Fuller discloses a method and system for monitoring communications usage (Figures 2 and 3), comprising:  
receiving a call (step 300 - Figure 3; column 8, line 55) at a service-providing network (the network depicted in Figure 2 at least including elements 41, 42, 43, 44), the call routed from a native transport network (the network depicted in Figure 2 at least including elements 21, 30, 47) directed to a virtual telephone number ("common" or "virtual fixed line number" column 3, lines 31-38) in the service-providing network (the network depicted in Figure 2 at least including elements 41, 42, 43, 44), the native transport network having limited or no capability (capability is fairly characterized as "limited") of providing advanced telephony service (step 303 -Figure 3;

column 10, lines 12-14; column 5, lines 9-27); providing the advanced telephony service to the call (for example: voice mail (VMS), call forwarding, etc - column 6, lines 45-50; Figure 2), wherein the virtual telephone number utilizes the intelligent services provided by the service-providing network (for example: voice mail (VMS), call forwarding, etc - column 6, lines 45-50; Figure 2); routing said call from the service-providing network (the network depicted in Figure 2 at least including elements 21, 30, 47) to a terminating network destination (step 303 -Figure 3; column 10, lines 12-14). (See also column 5, lines 9-27).

The two networks are considered "separate" as claimed because the service-providing network (the network depicted in Figure 2 at least including elements 41, 42, 43, 44) is wireline network while the native transport network (the network depicted in Figure 2 at least including elements 21, 30, 47) is wireless network as depicted in Figure 2.

Although Fuller discloses a method and system as described, Fuller does not specifically disclose a method and system comprising receiving a call routed from **a dialed number** in a native transport network to a virtual telephone number in a service providing network.

However, Koster discloses a method and system wherein a call is routed to a number in a platform which provides specific service (see abstract).

More particularly, Koster discloses a method and system wherein a caller dials the subscriber's wireless directory number. In step 304, the switch for the caller checks a local table to determine whether the number is portable. IN step 306, if the number is not portable the call is connected as normal (step 307) the service provider has "ported" the number to itself, the number is listed in the table as portable. In step if the number is portable 308, if the number is portable the switch sends a query to the LNP SCP to determine where the call should be routed.

In step 310, the LNP SCP examines its internal databases to determine the new service provider and the routing instructions. The wireless service provider has provided a local routing number for the platform to the PSTN service provider. In step 312, the LNP SCP sends a message back to the switch containing the routing instructions for the service platform. Then, the switch connects the call to the platform (see fig. 3, col. 5, line 53-col. 6, line 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Koster with the teachings described by Fuller to arrive at the claimed invention. A motivation for doing so would have been to properly port numbers to the appropriate platform.

Although Fuller discloses billing or charging for the call in a fixed-to-mobile basis (column 10, lines 15-17), the combination of Fuller with Koster does not specifically disclose monitoring the duration of the call traversing the service-providing network as claimed by applicant.

However, Jones et al. discloses a method including monitoring a duration of a call for billing purposes. After accepting a call (step S 14 - Figure 4) the service-providing system/network (CCS 18), routes the call (step S 16 -Figure 4), monitors the duration of the call and generates a bill (step S 17 - Figure 4); see column 14, lines 4-19 (especially line 8). Jones et al.'s method has the advantage of providing for better accuracy of billing since the call is monitored and timed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to monitor the duration of the call in Fuller's invention as suggested by himself by teaching billing or charging for the call because such monitoring provides for

accuracy of billing.

Regarding claim 2, Fuller and Jones et al. disclose everything claimed as applied above (see claim 1). In addition, as explained above the combination discloses monitoring a status of said call (monitoring for billing: step S 17 - Figure 4; see column 14, lines 4-19 (especially line 8) - Jones et al.).

Regarding claim 3, Fuller and Jones et al. disclose everything claimed as applied above (see claim 1). In addition, as explained above Fuller discloses routing said call to an original destination via the separate native transport network (step 303 -Figure 3; column 10, lines 12-14; column 5, lines 9-27).

Regarding claim 5, Fuller and Jones et al. disclose everything claimed as applied above (see claim 1). In addition, Fuller discloses that the service-providing network is a network selected from the group consisting of a wireline network, a wireless network, and a packet-switching network. For example, wireline/fixed-line network (depicted in Figure 2 at least including elements 41, 42, 43, 44).

Regarding claim 6, Fuller and Jones et al. disclose everything claimed as applied above (see claim 1). In addition, Fuller discloses associating the virtual telephone number to a wireless telephone number existing in the native transport network (the telephony device includes an identifier: MSISDN - column 3, lines 39-40. "There is an association in the switching network between this number and the MSISDN, such that incoming calls made to the virtual fixed-line number are translated to the MSISDN number" - column 2, lines 3-6. "The SCP 43 ... converts the number to ,an MSISDN" - column 5, line 57; see also column 8, lines 55-57. SCP 43 includes a database - column 8, line 48. HLR44 includes a database - column 5, line 30).

Regarding claim 7, Fuller and Jones et al. disclose everything claimed as applied above (see claim 1). In addition, Fuller discloses associating the virtual telephone number to "another" telephone number existing in the native transport network (the telephony device includes an identifier: MSISDN - column 3, lines 39-40. "There is an association in the switching network between this number and the MSISDN, such that incoming calls made to the virtual fixed-line number are translated to the MSISDN number" - column 2, lines 3-6. "The SCP 43 ... converts the number to an MSISDN" - column 5, line 57; see also column 8, lines 55-57. SCP 43 includes a database - column 8, line 48. HLR 44 includes a database - column 5, line 30).

Regarding claim 8, Fuller and Jones et al. disclose everything claimed as applied above (see claim 1). In addition, Fuller discloses that the native transport network is a network selected from the group consisting of a wireline network, a wireless network, and a packet-switching network. For example, wireless network (depicted in Figure 2 at least including elements 21, 30, 47)

Regarding claim 10, Fuller and Jones et al. disclose everything claimed as applied above (see claim 1). In addition, Fuller further discloses billing the subscriber (user; account) based on the duration of the call ("billing system 49 [...] generates billing information for charges incurred by the user of the handset 21"- column 5, lines 44-46; "billing system 49 is controlled to charge the common number account for the fixed-to-mobile leg of the call" - column 10, lines 15-17). Jones et al. also discloses billing the subscriber (customer) based on a duration of the call (step S 19 - Figure 4).

Regarding claim 12, Fuller and Jones et al. disclose everything claimed as applied above (see claim 11). In addition, as explained above the combination discloses the intelligent service

also monitors a status of the call (monitoring for billing: step S 17 - Figure 4; see column 14, lines 4-19 (especially line 8) -Jones et al.).

Regarding claim 13, Fuller and Jones et al. disclose everything claimed as applied above (see claim 1). In addition, as explained above Fuller discloses routing said call to an original destination via the separate native transport network (step 303 -Figure 3; column 10, lines 12-14; column 5, lines 9-27).

Regarding claim 14, Fuller and Jones et al. disclose everything claimed as applied above (see claim 11). In addition, Fuller discloses (a database i.e., SCP 43 / HLR 44 either singularly or in combination) associating the virtual telephone number to "another" telephone number existing in the native transport network (the telephony device includes an identifier: MSISDN - column 3, lines 39-40. "There is an association in the switching network between this number and the MSISDN, such that incoming calls made to the virtual fixed-line number are translated to the MSISDN number" - column 2, lines 3-6. "The SCP 43 ... converts the number to an MSISDN" - column 5, line 57; see also column 8, lines 55-57. SCP 43 includes a database - column 8, line 48. HLR 44 includes a database - column 5, line 30. Therefore, SCP 43 / HLR 44 either singularly or in combination read as the claimed database).

Regarding claim 16, Fuller and Jones et al. disclose everything claimed as applied above (see claim 11). In addition, Fuller's service-providing network is fairly characterized as an advanced intelligent network as claimed. Furthermore, Jones et al.'s service-providing network is an advanced intelligent network as claimed (column 5, line 10).

Regarding claims 18-19, Fuller and Jones et al. disclose everything claimed as applied above (see claim 11). In addition, Fuller discloses wherein the service-providing network



modifies caller information associated with the call (messages accompanying the call). (The telephony device includes an identifier: MSISDN - column 3, lines 39-40. "There is an association in the switching network between this number and the MSISDN, such that incoming calls made to the virtual fixed-line number are translated to the MSISDN number" - column 2, lines 3-6. "The SCP 43 ... converts the number to an MSISDN" - column 5, line 57; see also column 8, lines 55-57). The call is not routed back to the service-providing network in an endless loop because the call is properly routed/forwarded (column 6, lines 45-50; Figure 2).

4. Claims 9, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller (US Patent Number 6,775,546) in view of Jones et al. (US Patent Number 6195,422) and Koster as applied to claims I and 11 above, and further in view of Dent (US Patent Application Publication Number 2003/0050100).

Regarding claim 9, Fuller and Jones et al. disclose everything claimed as applied above (see claim 1). However, Fuller, Koster, and Jones et al. fail to specifically disclose billing a telecommunications provider of said native transport network for said monitoring. Dent discloses a method including monitoring a duration of a call (steps 206-212 - Figure 4) for billing purposes (step 214 - Figure 4); see paragraph 0027. "Apart from the economic benefits, communication quality benefits from the ability to access a larger number of antenna sites 12 allowing more frequent use of transmit and receive diversity to improve communications" - paragraph 0028. Another advantage is providing for better accuracy of billing since the call is monitored and timed.

In addition, Dent discloses billing a telecommunications provider of a native transport

network for said monitoring; see paragraph 0016, especially last sentence, paragraph 0027, especially last three sentences, and paragraph 0026, especially last two sentences. Dent's method has several advantages such as cross-bill (paragraph 0026, last two sentences), and enhanced roaming services (paragraph 0006).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Fuller and Jones et al. for billing a telecommunications provider of a native transport network for said monitoring for the advantage of cross-billing and allowing enhanced roaming services.

Regarding claim 15, Fuller and Jones et al. disclose everything claimed as applied above (see claim 11). In addition, Fuller discloses (a database i.e., SCP 43 / HLR 44 either singularly or in combination) associating the virtual telephone number to a voice-based telephone number existing in the native transport network (the telephony device includes an identifier: MSISDN-column 3, lines 39-40. "There is an association in the switching network between this number and the MSISDN, such that incoming calls made to the virtual fixed-line number are translated to the MSISDN number" - column 2, lines 3-6. "The SCP 43 ... converts the number to an MSISDN" - column 5, line 57; see also column 8, lines 55-57. SCP 43 includes a database - column 8, line 48. HLR 44 includes a database - column 5, line 30. Therefore, SCP 43 / HLR 44 either singularly or in combination read as the claimed database).

However, Fuller, Koster, and Jones et al. fail to specifically disclose that the voice-based telephone number is packet voice-based telephone number as claimed.

In analogous art, Dent discloses that the service-providing network includes a packet-switching network (IP-based communications or Internet network -paragraph 0025, especially

last line).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a packet-switching network capabilities with corresponding packet voice-based telephone number in Fuller and Jones et al.'s invention because this would enable Internet access as suggested by Dent which is very desirable.

Regarding claim 17, Fuller and Jones et al. disclose everything claimed as applied above (see claim 11). However, Fuller, Koster, and Jones et al. fail to specifically disclose a packet-switching network as claimed.

In analogous art, Dent discloses that the service-providing network includes a packet-switching network (IP-based communications or Internet network -paragraph 0025, especially last line).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a packet-switching network capabilities in Fuller and Jones et al.'s invention because this would enable Internet access as suggested by Dent which is very desirable.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PIERRE-LOUIS DESIR whose telephone number is (571)272-7799. The examiner can normally be reached on Monday-Friday 9:00AM- 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571)272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pierre-Louis Desir/  
Examiner, Art Unit 2617

/Dwayne D. BOST/  
Supervisory Patent Examiner,  
Art Unit 2617